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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,268	03/23/2002	Charles Eldering	T708-13	4098

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TECHNOLOGY, PATENTS AND LICENSING, INC./PRIME  
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EXAMINER

BROWN, RUEBEN M

ART UNIT PAPER NUMBER

2611

DATE MAILED: 10/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/031,268

Applicant(s)

ELDERING ET AL.

Examiner

Reuben M. Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-145 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-145 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) <u>6/21/05</u><br>Paper No(s)/Mail Date <u>11/27/05; 7/26/04; 8/14/04; 8/14/04</u> | 6) <input type="checkbox"/> Other: ____  |

CLC

**DETAILED ACTION**

***Priority***

1. It is noted that claims 56-57 appear to have been skipped in the application. Examiner did not renumber the claims.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7 & 11-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmelzer, (U.S. Pat # 5,424,770), in view of Carles, (U.S. Pat # 5,661,516).

Considering claim 1, the amended claimed advertising management system for managing insertion of advertisements in video streams, comprising an avail opportunities module for recognizing one or more opportunities within the video streams available for advertisements reads on Schmelzer (col. 3, lines 41-61; col. 4, lines 1-12; col. 10, lines 1-12). Schmelzer discusses an apparatus for inserting commercials in the avail that is appropriate according to the desired geographic area of the instant commercial.

Even though the commercials in Schmelzer are directed to different geographic areas, known as DMA (Designed Marketing Areas), Schmelzer does not specifically discuss characterizing or classifying the commercials. Nevertheless, such a technique was well known in the art at the time the invention was made, and is taught by Carles (Abstract). Carles, which is in the same field of endeavor as Schmelzer, is directed to methods for identifying commercials according their content characteristics and matching the instant commercials with audiences which has been determined to have a demographic make-up that would likely respond to the instant commercial with a purchase, therefore it is proper to combine the two references (col. 3, lines 40-60 & col. 5, lines 1-30). It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Schmelzer with technique of characterizing commercials and matching them with likely subscribers, at least for the desirable improvement of more efficiently targeting the instant commercials, as taught by Carles, (col. 1, lines 29-67).

Thus the amended claimed correlation module for determining a match between an avail and an advertisement, wherein the match is determined at least in part by correlating available subscriber characteristics with the advertisement reads on the disclosures of Carles, (col. 3, lines 28-40; col. 4, lines 66-67 thru col. 5, lines 1-30 & col. 9, lines 20-35).

Thus the combination of Schmelzer and Carles, reads on the claimed feature of a correlation module for determining a match between an avail and an advertisement, such that the match is determined by utilizing subscriber data.

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Considering claim 2, Schmelzer discusses that the avails may be known for a plurality of markets and for instance designated as 'A', 'B', 'C' or 'D', with respect to different geographic areas, but does not specifically discuss listing them, see Fig. 3 & col. & col. 9, lines 55-67. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Schmelzer, with the well-known data manipulation technique of organizing items according to a list, at least for desirable improvement of more efficiently accessing the instant items.

Considering claim 3, Carles discloses that the server 10 has access to a library of commercials 38, col. 3, lines 1-35.

Considering claims 4-6, Carles col. 3, lines 1-65 discloses all subject matters.

Considering claims 7 & 11-13, advertisement related data may be attached to commercials, see Carles col. 8, lines 58-65.

Considering claims 14-15, the percentile of potential subscribers to transmit a particular commercial is deterministic range, based on the instant subscribers having a higher probability of purchasing the advertised item, (col. 6, lines 9-21).

Considering claims 16-25, Carles teaches that the subscriber profile data may be determined and entered into the system. It would have been obvious for an operator to

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enter any data manually, at least for the known purpose of being able to manually proofread the instant data.

Considering claim 26, Carles teaches matching the ad characteristics information with avail opportunities in order to produce matches, (Abstract; col. 8, lines 58-65).

Considering claims 27, it would have been obvious to modify the combination of Schmelzer & Carles, with any number of algorithms for more efficiently determining the most appropriate audience for a commercial.

Considering claim 28, it would have been obvious to determine the actual number of members of the commercial audience, at least for the known purpose of more accurately billing the advertiser.

Considering claim 29, at the time the invention was made technology for protecting subscriber privacy was well known in the art. It would have been obvious for one ordinary skill in the art at the invention was made, to modify the combination of Schmelzer & Carles, with the well known technology of protecting subscriber privacy, for the desirable advantage of ensuring that subscriber personal information is only processed by authorized entities.

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Considering claims 30-37, Carles & Schmelzer are directed to systems which sell commercial time to advertisers, presumably using a profit making business model. It would have been obvious to utilize auction or Internet sales model at least for the desirable benefit of reaching a wider audience of potential advertisers.

Considering claim 38, Schmelzer & Carles necessarily includes means for billing advertisers.

Considering claim 39, Schmelzer & Carles include means for receiving and managing advertisements.

4. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmelzer & Carles, further in view of Kuzma, (U.S. Pat # 5,889,950).

Considering claims 8-10, Schmelzer & Carles, do not discuss a graphical user interface for entering advertisement related data. However, Kuzma teaches that a keyboard interface 132 may be used in order to control the computer system 100. (col. 3, lines 64-67 thru col. 4, lines 1-30). Kuzma is directed to a system for scheduling TV broadcast programming, including advertisements. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combination of Schmelzer & Carles, by including a GUI for entering TV programming information at the server as taught

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by Kuzma, at least for the desirable improvement of giving the operator more control over the process.

5. Claims 40-55 & 58-145 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carles, in view of Freeman, (U.S. Pat # 5,861,881).

Considering claim 40, regarding the claimed apparatus for inserting advertisements in a video stream, comprising an ad manager for receiving one or more advertisements from one or more sources and managing the ad insertion process. Carles teaches that the video server 10 has access to library of commercials 38, and overall controls the process, see col. 3, lines 1-60.

Furthermore, Carles teaches that a data stream including programming and commercial messages is generated at the server 10. (Abstract: col. 2, lines 35-67) but does not explicitly discuss the method of transmission to subscribers 15. Nevertheless, Freeman teaches transmitting one or more programs simultaneously in a multiplexing algorithm, (col. 4, lines 58-67; col. 6, lines 24-38 & col. 7, lines 20-30). It would have been obvious for one ordinary skill in the art at the time the invention was made, to modify Carles with the featuring of channel multiplexing of content as taught by Freeman, at least for the desirable benefit of avoiding the use of upstream technology in retrieving the requested content.



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Freeman is compatible with Carles, since they both operate at least one embodiment by including instructions in a transmission which controls a subscriber's receiver tuner to automatically tune to a channel, in order to retrieve and display additional content to the user. However, in Freeman it is taught that the additional content on the other channels are multiplexed to the subscriber along with the main programming.

Considering claims 41-43, the video server 10 accesses the library of commercials 38, it would have been obvious for the library of the commercials to be local or remote from the video server 10.

Considering claim 44, the video server receives programs from one or more sources at least in a digital format and forwards them to subscribers, (col. 4, lines 50-60).

Considering claims 45-46, the system of Carles is enabled to process signals in a compressed, digital format or analog format, col. 4, lines 36-60.

Considering claim 47, Carles operates in real-time, col. 4, lines 18-27.

Considering claim 48. Carles inherently buffers the commercials until they are transmitted.

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Considering claims 49-51, Carles necessarily includes a means for synchronizing commercials with broadcast programming.

Considering claim 52, Carles utilizes computers and therefore necessarily is deployed with some manner of software, col. 2, lines 54-57.

Considering claims 53-54, Carles is directed to a system for recognizing one or more advertisement opportunities in a broadcast program, (col. 3, lines 30-40) determining one or more characteristics of a subscriber & an advertisement, (col. 4, lines 66-67 thru col. 5, lines 1-30) and correlating and advertisement with a subscriber according to the characteristics of each, (Abstract; col. 9, lines 21-25).

Considering claim 55, at the time the invention was made technology for protecting subscriber privacy was well known in the art. It would have been obvious for one ordinary skill in the art at the invention was made, to modify Carles, with the well known technology of protecting subscriber privacy, for the desirable advantage of ensuring that subscriber personal information is only processed by authorized entities.

Considering claims 58 & 127-128, the combination of Carles and Freeman teaches transmitting commercials along with broadcast programming, in real time (col. 2, lines 48-64; col. 4, lines 51-60). However, Freeman teaches frequency multiplexing. Official Notice is taken that at the time the invention was made, statistical multiplexing (or time

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division multiplexing) was very well known in the art. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the combination of Carles & Freeman to utilize statistical multiplexing, for the extremely well known advantage of preserving channel bandwidth allocation.

Considering claim 59, see Carles col. 3, lines 55-63.

Considering claims 60 & 78-80, it would have been obvious to set a price for the advertisements based on any number of profit making algorithms.

Considering claims 61-65, see Carles (col. 4, lines 66-67 thru col. 5, lines 1-30).

Considering claims 66-68, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the parameters utilized to profile subscribers, at least for the desirable benefit of more accurately describing the user.

Considering claim 69, Carles discloses grouping subscribers, col. 9, lines 21-30.

Considering claims 70-72, see Carles col. 3, lines 1-30.

Considering claim 73-74, deriving a value of an item based on a weighted average was a well known technique at the time the invention was made. It would have been

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obvious for one of ordinary skill in the art at the time the invention was made, to modify Carles with the well known technique of using weighted values, at least in order to determine the relative strength of the particular categories.

Considering claim 75-77, Carles discloses all subject matter.

Considering claims 81-84, Carles is directed to profiling individuals, households and demographic groups of subscribers, (col. 1, lines 15-67; col. 3, lines 41-55; col. 9, lines 21-30).

Considering claims 86-89, 100-101, 127 & 129, Carles discloses inserting selected advertisements in program streams in order to generate one or more multiplexed digital stream, in a synchronized manner (col. 4, lines 35-65).

Considering claim 85, it would have been obvious to utilize Nielsen ratings in profiling subscribers.

Considering claims 90-94, 102-107 & 142-143, the commercials are inserted into the bit stream of the broadcast programming, which requires the that the bit rates are synchronized, (col. 3, lines 55-62).

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Considering claims 95-97, 108-110 & 132, it would have been obvious to linearize the commercials and programs to the same unit values, at least for the desirable advantage of more efficiently combining the two or more streams.

Considering claims 98, 111 & 131, the commercials may be inserted on demand, i.e., in an asynchronous manner.

Considering claim 99, Carles discloses all subject matter.

Considering claims 112-115, see Carles (Abstract).

Considering claims 116-118, see Carles (Abstract; col. 3, lines 15-41).

Considering claims 119-125, it would have been obvious to transmit the commercials in any number of well known data transmission algorithm, either with or concurrent with video data for the benefit of more efficiently utilizing the system.

Considering claims 126 & 141, the claimed method of targeting advertisements to subscribers corresponds with subject matter mentioned above in the analysis of claims 40 & 53, and is likewise analyzed.

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Considering claim 133, available bit rate technology was very well known in the art at the time the invention was made. It would have been obvious to utilize ABR technology at least for the advantage of more efficiently preserving channel bandwidth.

Considering claims 134-135, 137 & 140, see Carles (Abstract & col. 5, lines 1-40).

Considering claims 136, 138-139 & 144-145; see Freeman (col. 4, lines 15-18 & col. 6. lines 45-68).

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Saxe Teaches distributing commercial based on demographic profiles of user(s).

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**Any response to this action should be mailed to:**

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**or faxed to:**

(571) 273-8300, (for formal communications intended for entry)

**Or:**


(571) 273-7290 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F (9:00-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (571) 272-7294. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300 for regular communications and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Reuben M. Brown

  
**REUBEN M. BROWN**  
**PATENT EXAMINER**